



#3 OIPE

RAW SEQUENCE LISTING

DATE: 05/21/2002

PATENT APPLICATION: US/10/053,611

TIME: 14:19:36

Input Set : N:\Cr3\RULE60\10053611.raw

Output Set: N:\CRF3\05212002\J053611.raw

1 <110> APPLICANT: Polyak, Kornelia
 2 Vogelstein, Bert
 3 Kinzler, Kenneth
 4 <120> TITLE OF INVENTION: Subtle Mitochondrial Mutations as Tumor
 5 Markers
 6 <130> FILE REFERENCE: 1107.82346
 7 <140> CURRENT APPLICATION NUMBER: 10/053,611
 8 <141> CURRENT FILING DATE: 2002-01-24
 10 <150> PRIOR APPLICATION NUMBER: US/09/377,856
 11 <151> PRIOR FILING DATE: 1999-08-20
 14 <150> PRIOR APPLICATION NUMBER: 60/097,307
 15 <151> PRIOR FILING DATE: 1998-08-20
 16 <160> NUMBER OF SEQ ID NOS: 1
 17 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 16569
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Homo sapiens
 23 <400> SEQUENCE: 1

24	gatcacaggt ctatcaccct attaaccaact cacgggagct ctccatgcat ttggtatattt	60
25	cgtctggggg gtatgcacgc gatagcattg cgagacgctg gagccggagc accctatgtc	120
26	gcagtatctg tctttgattc ctgcctcatc ctattattta tcgcacctac gttcaatatt	180
27	acaggcgaac atacttacta aagtgtgtta attaatattt gottgttagga cataataata	240
28	acaattgaat gtctgcacag ccaatttcca cacagacatc ataacaaaaa atttccacca	300
29	aacccccct ccccgcttc tggccacagc acttaaacac atctctgcc aacccccaaa	360
30	acaaagaacc ctaacaccag cctaaccaga tttaaatttt tatcttttgg cggtagtcac	420
31	ttttaacagt cccccccaa ctaacacatt attttccctt cccactccca tactactaat	480
32	ctcatcaata caacccccgc ccactctacc cagcacacac acaccgctgc taaccccata	540
33	ccccgaacca accaaacccc aaagacaccc ccacagttt atgtagctta cctcctcaaa	600
34	gcaatacact gaaaatgttt agacgggctc acatcacccc ataaacaaat aggtttggtc	660
35	ctagcctttc tattagctct tagtaagatt acacatgcaa gcaccccggt tccagttagt	720
36	tcaccctcta aatcaccacg atcaaaaggg acaagcatca agcacgcagc aatgcagctc	780
37	aaaacgctta gcctagccac acccccacgg gaaacagcag tgattaacct ttagcaataa	840
38	acgaaagtgt aactaagcta tactaaccct agggttggtc aatttcgtgc cagccaccgc	900
39	ggtcacacga ttaacccaag tcaatagaag cggcgtaaa gagtgtttta gatcaccccc	960
40	tccccataaa agctaaaact cacctgagtt gtaaaaaact ccagttgaca caaaatagac	1020
41	tacgaaagtg gctttaacat atctgaacac acaatagcta agacccaaac tgggattaga	1080
42	taccctacta tgcttagccc taaacctcaa cagttaaatc aacaaaactg ctcgccagaa	1140
43	cactacgagc cacagcttaa aactcaaagg acctggcggg gcttcataat cctctagagg	1200
44	agcctgttct gtaatcgata aaccccgatc aacctcacca cctcttgctc agcctatata	1260
45	ccgccatctt cagcaaaccg tgatgaaggc tacaaagtaa gcgcaagtac ccacgtaaaag	1320
46	acgttaggtc aaggtgtagc ccatgagggt gcaagaaatg ggctacattt tctacccccag	1380
47	aaaactacga tagcccttat gaaacttaag ggtcgaagggt ggatttagca gtaaactaag	1440

ENTERED

RAW SEQUENCE LISTING

DATE: 05/21/2002

PATENT APPLICATION: US/10/053,611

TIME: 14:19:36

Input Set : N:\Crf3\RULE60\10053611.raw

Output Set: N:\CRF3\05212002\J053611.raw

48	agtagagtgc	ttagttgaac	agggccctga	agcgcgtaca	caccgcccgt	caccctctct	1500
49	aagtatactt	caaaggacat	ttaactaaaa	cccctacgca	tttatataga	ggagacaagt	1560
50	cgtaacatgg	taagtgtact	ggaaagtgca	cttggacgaa	ccagagtgtg	gcttaacaca	1620
51	aagcacccaa	cttacactta	ggagatttca	acttaacttg	accgctctga	gctaaacctt	1680
52	gccccaaacc	cactccacct	tactaccaga	caaccttagc	caaaccattt	acccaaataa	1740
53	agtataggcg	atagaaattg	aaacctggcg	caatagatat	agtaccgcaa	gggaaagatg	1800
54	aaaaattata	accaagcata	atatagcaag	gactaacccc	tataccttct	gcataatgaa	1860
55	ttaactagaa	ataactttgc	aaggagagcc	aaagctaaga	cccccgaac	cagacgagct	1920
56	acctaagaac	agctaaaaga	gcacaccctg	ctatgtagca	aaatagtggg	aagatttata	1980
57	ggtagaggcg	acaaacctac	cgagcctggg	gatagctggg	tgtccaagat	agaatcttag	2040
58	ttcaacttta	aatttgccca	cagaaccctc	taaatccctt	tgtaaattta	actgttagtc	2100
59	caaagaggaa	cagctctttg	gacactagga	aaaaaccttg	tagagagagt	aaaaaattta	2160
60	acacccatag	taggcctaaa	agcagccacc	aattaagaaa	gcgttcaagc	tcaacaccca	2220
61	ctacctaaaa	aatcccaaac	atataactga	actcctcaca	cccaattgga	ccaatctatc	2280
62	accctataga	agaactaatg	ttagtataag	taacatgaaa	acattctcct	ccgcataagc	2340
63	ctgcgtcaga	ttaaaacact	gaactgacaa	ttaacagccc	aatatctaca	atcaaccaac	2400
64	aagtcattat	tacctcact	gtcaacccaa	ccagggcatg	ctcataagga	aaggttaaaa	2460
65	aaagtaaaag	gaactcggca	aatcttacct	cgcctgttta	ccaaaaacat	cacctctagc	2520
66	atcacaggta	ttagaggcac	cgcctgcccc	gtgacacatg	tttaacggcc	gcggtaccct	2580
67	aaccgtgcaa	aggtagcata	atcacttggt	ccttaaatag	ggacctgtat	gaatggctcc	2640
68	acgagggttc	agctgtctct	tacttttaac	cagtgaatt	gacctgcccg	tgaagaggcg	2700
69	ggcataaac	agcaagacga	gaagacccta	tggagcttta	atttattaat	gcaaacagta	2760
70	cctaacaac	ccacaggctc	taaactacca	aacctgcatt	aaaaatttcg	gttggggcga	2820
71	cctcggagca	gaacccaacc	tccgagcagt	acatgctaag	acttcaccag	tcaaagcgaa	2880
72	ctactatact	caattgatcc	aataacttga	ccaacggaac	aagttaccct	agggataaca	2940
73	gcgcaatcct	attctagagt	ccatatcaac	aatagggttt	acgacctoga	tgttggtatc	3000
74	ggacatcccg	atggtgcagc	cgtattataa	ggttcgtttg	ttcaacgatt	aaagtcctac	3060
75	gtgatctgag	ttcagaccgg	agtaatccag	gtcggtttct	atctaccttc	aaattcctcc	3120
76	ctgtacgaaa	ggacaagaga	aataaggcct	acttcacaaa	gcgccttccc	ccgtaaatga	3180
77	tatcatctca	acttagtatt	ataccacac	ccacccaaga	acagggtttg	ttaagatggc	3240
78	agagcccggg	aatcgcataa	aacttaaaac	tttacagtca	gaggttcaat	tcctcttctt	3300
79	aacaacatac	ccatggccaa	cctcctaact	ctcattgtac	ccattctaat	cgcaatggca	3360
80	ttcctaattg	ttaccgaacg	aaaaattcta	ggctatatac	aactacgcaa	aggccccaac	3420
81	gttgtaggcc	cctacgggct	actacaaccc	ttcgtgacg	ccataaaact	cttcacaaa	3480
82	gagcccctaa	aaccgcccac	atctaccatc	accctctaca	tcaccgcccc	gaccttagct	3540
83	ctcaccatcg	ctcttctact	atgaaccccc	ctccccatac	ccaacccctt	ggtcaacctc	3600
84	aacctaggcc	tcctattttat	tctagccacc	tctagcctag	ccgttttact	aatcctctga	3660
85	tcagggtgag	catcaaacct	aaactacgcc	ctgatcggcg	cactgcgagc	agtagcccaa	3720
86	acaatctcat	atgaagtcac	cctagccatc	attctactat	caacattact	aataagtggc	3780
87	tcctttaacc	tctccacctt	tatcacaaca	caagaacacc	tctgattact	cctgccatca	3840
88	tgacctttgg	ccataatatg	atttatctct	acactagcag	agaccaaccg	aaccccttct	3900
89	gaccttgccg	aaggggagtc	cgaactagtc	tcaggcttca	acatcgaata	cgccgcaggc	3960
90	cccttcgccc	tattcttcat	agccgaatac	acaaacatta	ttataataaa	caccctcacc	4020
91	actacaatct	tcctaggaac	aacatatgac	gcactctccc	ctgaactcta	cacaacatat	4080
92	tttgtcacca	agaccctact	tctaacctcc	ctgttcttat	gaattcgaac	agcatacccc	4140
93	cgattccgct	acgaccaact	catacacctc	ctatgaaaaa	acttcctacc	actcacccta	4200
94	gcattactta	tatgatatgt	ctccataccc	attacaatct	ccagcattcc	ccctcaaacc	4260
95	taagaaatat	gtctgataaa	agagttactt	tgatagagta	aataatagga	gcttaaacc	4320
96	ccttatttct	aggactatga	gaatcgaacc	catccctgag	aatccaaaat	tctccgtgcc	4380

RAW SEQUENCE LISTING

DATE: 05/21/2002

PATENT APPLICATION: US/10/053,611

TIME: 14:19:36

Input Set : N:\Crif3\RULE60\10053611.raw

Output Set: N:\CRF3\05212002\J053611.raw

97	acctatcaca ccccatccta aagtaaggtc agctaaataa gctatcgggc ccataccccg	4440
98	aaaatgttgg ttataccctt cccgtactaa ttaatcccct ggcccaaccc gtcattctact	4500
99	ctaccatctt tgcaggcaca ctcatcacag cgctaagctc gcactgattt ttacctgag	4560
100	taggcctaga aataaacatg ctagctttta ttccagttct aacccaaaaa ataaaccctc	4620
101	gttccacaga agctgccatc aagtatttcc tcacgcaagc aaccgcatcc ataactcttc	4680
102	taatagctat cctcttcaac aatatactct cgggacaatg aaccataacc aatactacca	4740
103	atcaatactc atcattaata atcataatag ctatagcaat aaaactagga atagccccct	4800
104	ttcacttctg agtcccagag gttacccaag gaccccctct gacatccggc ctgcttcttc	4860
105	tcacatgaca aaaactagcc cccatctcaa tcatatacca aatctctccc tcaactaaacg	4920
106	taagccttct cctcaactct tcaatcttat ccatcatagc aggcagttga ggtggattaa	4980
107	accagaccca gctacgcaaa atcttagcat actcctcaat taccacata ggatgaataa	5040
108	tagcagttct accgtacaac cctaacataa ccattcttaa ttttaactatt tatattatcc	5100
109	taactactac cgcattccta ctactcaact taaactccag caccacgacc ctactactat	5160
110	ctcgcacctg aaacaagcta acatgactaa cacccttaat tccatccacc ctctctctcc	5220
111	taggaggcct gcccccgcta accggctttt tgcccaaatg ggccattatc gaagaattca	5280
112	caaaaaacaa tagcctcatc atccccacca tcatagccac catcacctc cttaacctct	5340
113	acttctacct acgcctaate tactccacct caatcacact actccccata tctaacaacg	5400
114	taaaaataaa atgacagttt gaacatacaa aacccacccc attcctcccc acactcatcg	5460
115	cccttaccac gctactccta cctatctccc cttttatact aataatctta tagaaattta	5520
116	ggttaaatac agaccaagag ccttcaaagc cctcagtaag ttgcaatact taattttctgt	5580
117	aacagctaag gactgcaaaa ccccaactct catcaactga acgcaaatca gccactttta	5640
118	ttaagctaag cccttactag accaatggga cttaaaccac caaacactta gttaacagct	5700
119	aagcacccta atcaactggc ttcaatctac ttctcccgcc gccgggaaaa aaggcgggag	5760
120	aagccccggc aggtttgaag ctgcttcttc gaatttgcaa ttcaatatga aaatcacctc	5820
121	ggagctggta aaaagaggcc taaccctgt ctttagattt acagtccaat gcttactca	5880
122	gccattttac ctacccccca ctgatgttcg ccgaccgttg actattctct acaaaccaca	5940
123	aagacattgg aacactatac ctattattcg gcgcatgagc tggagtccta ggcacagctc	6000
124	taagcctcct tattcgagcc gagctgggcc agccaggcaa ccttctaggt aacgaccaca	6060
125	tcataaacgt tatcgtcaca gcccatgcat ttgtaataat cttcttcata gtaataccca	6120
126	tcataatcgg aggccttggc aactgactag ttccccta atatcggtgcc cccgatatgg	6180
127	cgtttccccg cataaacaac ataagcttct gactcttacc tccctctctc ctactcctgc	6240
128	tcgcatctgc tatagtggag gccggagcag gaacaggttg aacagttctc cctcccttag	6300
129	cagggaaacta ctcccacct ggagcctccg tagacctaac catcttctcc ttacacctag	6360
130	caggtgtctc ctctatctta ggggccatca atttcatcac aacaattatc aatataaaac	6420
131	cccctgccat aacccaatac caaacgcccc tcttcgtctg atccgtccta atcacagcag	6480
132	tcctacttct cctatctctc ccagtcctag ctgctggcat cactatacta ctaacagacc	6540
133	gcaacctcaa caccaccttc ttcgaccccg ccggaggagg agacccatt ctataccaac	6600
134	acctattctg atttttcggt caccctgaag tttatattct tatcctacca ggcttcggaa	6660
135	taatctccca tattgtaaat tactactccg gaaaaaaaga accatttgga tacataggta	6720
136	tggctctgagc tatgatatac attggcttcc tagggtttat cgtgtgagca caccatatat	6780
137	ttacagtagg aatagacgta gacacacgag catatttcac ctccgctacc ataactcatg	6840
138	ctatccccac cggcgtaaaa gtatttagct gactcgccac actccacgga agcaatatga	6900
139	aatgatctgc tgcagtgtc tgagccctag gattcatctt tcttttcacc gtaggtggcc	6960
140	tgactggcat tgtattagca aactcatcac tagacatcgt actacacgac acgtactacg	7020
141	ttgtagccca ctccactat gtcctatcaa taggagctgt atttgccatc ataggaggt	7080
142	tcattcactg atttccccta ttctcaggct acaccctaga ccaaacctac gccaaaatcc	7140
143	atttccactat catattcatc ggcgtaaatc taactttctt cccacaacac tttctcgcc	7200
144	tatccggaat gccccgacgt tactcggact accccgatgc atacaccaca tgaaacatcc	7260
145	tatcatctgt aggtcattc atttctctaa cagcagtaat attaataatt ttcatgattt	7320

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/053,611

DATE: 05/21/2002

TIME: 14:19:37

Input Set : N:\Crf3\RULE60\10053611.raw

Output Set: N:\CRF3\05212002\J053611.raw

146	gagaagcctt	cgcttcgaag	cgaaaagtcc	taatagtaga	agaaccctcc	ataaacctgg	7380
147	agtgactata	tggatgcccc	ccaccctacc	acacattcga	agaacccgta	tacataaaat	7440
148	ctagacaaaa	aaggaaggaa	togaaccccc	caaagctggt	ttcaagccaa	ccccatggcc	7500
149	tccatgactt	tttcaaaaag	gtattagaaa	aaccatttca	taactttgtc	aaagttaaat	7560
150	tataggctaa	atcctatata	tcttaatggc	acatgcagcg	caagtaggtc	tacaagacgc	7620
151	tacttcccc	atcatagaag	agcttatcac	ctttcatgat	cacgcccctca	taatcatttt	7680
152	ccttatctgc	ttcctagtc	tgtatgcctt	tttctaaca	ctcacaacaa	aactaactaa	7740
153	tactaacatc	tcagacgctc	aggaaataga	aaccgtctga	actatcctgc	ccgccatcat	7800
154	cctagtcctc	atcgccctcc	catccctacg	catcctttac	ataacagacg	aggtcaacga	7860
155	tccctccctt	accatcaaat	caattggcca	ccaatggtac	tgaacctacg	agtacaccga	7920
156	ctacggcgga	ctaattcttca	actcctacat	acttccccca	ttattcctag	aaccaggcga	7980
157	cctgcgactc	cttgacgttg	acaatcgagt	agtactcccg	attgaagccc	ccattcgtat	8040
158	aataattaca	tcacaagaag	tcttgactc	atgagctgtc	cccacattag	gcttaaaaac	8100
159	agatgcaatt	ccggagcgtc	taaaccaaac	cactttcacc	gctacacgac	cgggggtata	8160
160	ctacgggtcaa	tgctctgaaa	tctgtggagc	aaaccacagt	ttcatgcccc	tcgtcctaga	8220
161	attaattccc	ctaaaaatct	ttgaaatagg	gcccgatatt	accctatagc	acccccctca	8280
162	cccccctctag	agcccactgt	aaagctaact	tagcattaac	cttttaagtt	aaagattaag	8340
163	agaaccaaca	cctctttaca	gtgaaatgcc	ccaactaaat	actaccgtat	ggcccaccat	8400
164	aattaccccc	atactcctta	cactattcct	catcacccaa	ctaaaaatat	taaacacaaa	8460
165	ctaccacctc	cctccctcac	caaagcccat	aaaaataaaa	aattataaca	aacctgaga	8520
166	acaaaaatga	acgaaaatct	gttcgcttca	ttcattgccc	ccacaatcct	aggcctaccc	8580
167	gcgcgagtac	tgatcattct	atttccccct	ctattgatcc	ccacctccaa	atatctcatc	8640
168	aacaaccgac	taatcaccac	ccaacaatga	ctaatacaac	taacctcaaa	acaaatgata	8700
169	accatacaca	acactaaagg	acgaacctga	tctcttatac	tagtatcctt	aatcattttt	8760
170	attgccacaa	ctaacctcct	cggactcctg	cctcactcat	ttacaccaac	cacccaacta	8820
171	tctataaacc	tagccatggc	catcccctta	tgagcgggca	cagtgtattat	aggctttcgc	8880
172	tctaagattc	aaaatgccc	agcccacttc	ttaccacaag	gcacacctac	accccttata	8940
173	cccatactag	ttattatoga	aaccatcagc	ctactcattc	aaccaatagc	cctggcgcta	9000
174	cgctaaccg	ctaacattac	tgcaggccac	ctactcatgc	acctaattgg	aagcgccacc	9060
175	ctagcaatat	caaccattaa	ccttccctct	acacttatca	tcttcacaat	tetaattcta	9120
176	ctgactatcc	tagaaatcgc	tgtcgcctta	atccaagcct	acgttttcac	acttctagta	9180
177	agcctctacc	tgacgacaaa	cacataatga	cccaccaatc	acatgcctat	catatagtaa	9240
178	aaccagccc	atgaccccta	acaggggccc	tctcagccct	cctaattgacc	tcgggcctag	9300
179	ccatgtgatt	tcacttccac	tccataacgc	tctcataact	aggcctaacta	accaacacac	9360
180	taaccatata	ccaatgatgg	cgcgatgtaa	cacgagaaag	cacataccaa	ggccaccaca	9420
181	caccaoctgt	ccaaaaaggc	cttcgatagc	ggataatcct	atttattacc	tcagaagtgt	9480
182	ttttcttgc	aggatttttc	tgagcctttt	accactccag	cctagcccct	accccccaat	9540
183	taggagggca	ctggccccc	acaggcatca	ccccgctaaa	tcccctagaa	gtcccactcc	9600
184	taaacacatc	cgtattactc	gcacagggag	tatcaatcac	ctgagctcac	catagtctaa	9660
185	tagaaaacaa	ccgaaaccaa	ataattcaag	cactgcttat	tacaatttta	ctgggtctct	9720
186	attttaccct	cctacaagcc	tcagagtact	togagtctcc	cttcaccatt	tcggacggca	9780
187	tctacggctc	aacatttttt	gtagccacag	gcttccacgg	acttcacgtc	attattggct	9840
188	caactttcct	cactatctgc	ttcatccgcc	aactaatatt	tcactttaca	tccaaacatc	9900
189	actttggctt	cgaagccgcc	gocctgatact	ggcattttgt	agatgtgggt	tgactatttc	9960
190	tgtatgtctc	catctattga	tgaggggtct	actcttttag	tataaatagt	accgttaact	10020
191	tccaattaac	tagttttgac	aacattcaaa	aaagagtaat	aaacttcgcc	ttaattttta	10080
192	taatcaacac	cctcctagcc	ttactactaa	taattattac	attttgacta	ccacaactca	10140
193	acggctacat	agaaaaatcc	accccttacg	agtgcggctt	cgaccctata	tccccgcgcc	10200
194	gogtcccttt	ctccataaaa	ttcttcttag	tagctattac	cttcttatta	tttgatctag	10260

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/053,611

DATE: 05/21/2002

TIME: 14:19:37

Input Set : N:\Crif3\RULE60\10053611.raw

Output Set: N:\CRF3\05212002\J053611.raw

195	aaattgcctt	cctttttaccc	ctaccatgag	ccctacaaac	aactaacctg	ccactaatag	10320
196	ttatgtcatc	cctcttatta	atcatcatcc	tagccctaag	tctggcctat	gagtgaactac	10380
197	aaaaaggatt	agactgaacc	gaattggtat	atagttttaa	caaaacgaat	gatttcgact	10440
198	cattaaatta	tgataatcat	atttaccaa	tgccctcat	ttacataaat	attatactag	10500
199	catttaccat	ctcacttcta	ggaatactag	tatatcgctc	acacctcata	tcctccctac	10560
200	tatgcctaga	aggaataata	ctatogctgt	tcattatagc	tactctcata	acctcaaca	10620
201	cccactccct	cttagccaat	attgtgccta	ttgccatact	agtctttgcc	gcctgcgaag	10680
202	cagcgggtgg	cctagcccta	ctagtctcaa	tctccaacac	atatggccta	gactacgtac	10740
203	ataacctaaa	cctactccaa	tgctaaaact	aatcgctcca	acaattatat	tactaccact	10800
204	gacatgactt	tccaaaaaac	acataatttg	aatcaacaca	accacccaca	gcctaattat	10860
205	tagcatcatc	cctctactat	tttttaacca	aatcaacaac	aacctattta	gctgttcccc	10920
206	aaccttttcc	tccgaccccc	taacaacccc	cctcctaata	ctaactacct	gactcctacc	10980
207	cctcacaatc	atggcaagcc	aacgcacttt	atccagtga	ccactatcac	gaaaaaaact	11040
208	ctacctctct	atactaattc	ccctacaaat	ctccttaatt	ataacattca	cagccacaga	11100
209	actaatcata	ttttatatct	tcttcgaaac	cacacttata	cccaccttgg	ctatcatcac	11160
210	ccgatgaggc	aaccagccag	aacgcctgaa	cgcaggcaca	tacttctcat	tcacacct	11220
211	agtaggctcc	cttccctcac	tcatcgact	aatttacact	cacaaccccc	taggctcact	11280
212	aaacattcta	ctactcactc	tcactgcccc	agaactatca	aactcctgag	ccaataactt	11340
213	aatatgacta	gcttacacaa	tagctttttat	agtaaagata	cctcttttac	gactccactt	11400
214	atgactccct	aaagcccatg	tcgaagcccc	catcgctggg	tcaatagtac	ttgccgcagt	11460
215	actcttaaaa	ctaggcggct	atggtataat	acgcctcaca	ctcattctca	acccctgac	11520
216	aaaacacata	gcctacccct	tccttgtaact	atccctatga	ggcataatta	taacaagctc	11580
217	catctgccta	cgacaaacag	acctaaaatc	gctcattgca	tactcttcaa	tcagccacat	11640
218	agccctcgta	gtaacagcca	ttctcatcca	aacccctga	agcttcaccg	gcgcagtcac	11700
219	tctcataatc	gcccacgggc	ttacatcctc	attactatct	tgccatgcaa	actcaacta	11760
220	cgaacgcact	cacagtcgca	tcataatcct	ctctcaagga	cttcaaactc	tactcccact	11820
221	aatagctttt	tgatgacttc	tagcaagcct	cgctaacctc	gccttacccc	ccactattaa	11880
222	cctactggga	gaactctctg	tgctagtaac	caagttctcc	tgatcaaata	tcactctcct	11940
223	acttacagga	ctcaacatac	tagtcacagc	cctatactcc	ctctacatat	ttaccacaac	12000
224	acaatggggc	tactcacc	accacattaa	caacataaaa	ccctcattca	cacgagaaaa	12060
225	cacctcatg	ttcatacacc	tatcccccat	tctctccta	tcctcacc	ccgacatcat	12120
226	taccgggttt	tcctcttgta	aatatagttt	aacaaaaca	tcagattgtg	aactctgaca	12180
227	cagaggctta	cgacccctta	tttaccgaga	aagctcaca	gaactgctaa	ctcatgcccc	12240
228	catgtctaac	aacatggctt	tctcaacttt	taaaggataa	cagctatcca	ttggtcttag	12300
229	gccccaaaaa	ttttgggtgca	actccaaata	aaagtaataa	ccatgcacac	tactataacc	12360
230	accctaacc	tgacttccct	aattcccccc	atccttacca	ccctcgttaa	ccctaacaaa	12420
231	aaaaactcat	acccccatta	tgtaaaaatcc	attgtcgcat	ccacctttat	tatcagctct	12480
232	ttccccacaa	caatatccat	gtgcctagac	caagaagtta	ttatctcgaa	ctgacactga	12540
233	gccacaaccc	aaacaaccca	gctctcccta	agcttcaaac	tagactactt	ctccataata	12600
234	ttcatccctg	tagcattggt	cgttacatgg	tccatcatag	aattctcact	gtgatataata	12660
235	aactcagacc	caaacattaa	tcagttcttc	aaatatctac	tcactctcct	aattaccata	12720
236	ctaactcttag	ttaccgctaa	caacctattc	caactgttca	tcggctgaga	gggcgtagga	12780
237	attatatcct	tcttgctcat	cagttgatga	tacgcccag	cagatgccaa	cacagcagcc	12840
238	attcaagcaa	tcctatacaa	ccgtatcggc	gatatcggtt	tcactcctgc	cttagcatga	12900
239	tttatccctac	actccaactc	atgagaccca	caacaaatag	cccttctaaa	cgctaatacca	12960
240	agcctcacc	cactactagg	cctcctccta	gcagcagcag	gcaaatacag	ccaattaggt	13020
241	ctccacccct	gactccctc	agccatagaa	ggccccaccc	cagtctcagc	cctactccac	13080
242	tcaagcacta	tagttgtagc	aggaatcttc	ttactcatcc	gcttccaccc	cctagcagaa	13140
243	aatagcccac	taatccaaac	tctaacacta	tgcttaggcg	ctatcaccac	tctgttcgca	13200

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/053,611

DATE: 05/21/2002

TIME: 14:19:38

Input Set : N:\Crf3\RULE60\10053611.raw

Output Set: N:\CRF3\05212002\J053611.raw